

THE ANALYSIS OF FACTORS INFLUENCE THE PROFESSIONAL COMPETENCE OF ACCOUNTING TEACHER AT THE VACATIONAL SCHOOL IN LANGKAT REGENCY WITH MOTIVATION AS A MODERATING VARIABLE

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Abstract: *The objective of the research was to analyze some factors which influenced professional competence of Accounting teachers at the SMK (Vocational Schools) in Langkat Regency with motivation as moderating variable. The research used causal associative method. The population was 45 SMK Accounting teachers in Langkat Regency as the respondents, and all of them were used as the samples (total sampling). Primary data were gathered by distributing questionnaire to the respondents and analyzed by using multiple regression analysis and residual test. The result of the research showed that educational background, training and development, academic supervision, compensation, and the use of information technology and communication simultaneously had positive and significant influence on professional competence of SMK Accounting teachers in Langkat Regency. Partially, educational background, training, and development had positive and significant influence on professional competence of SMK Accounting teachers in Langkat Regency, while academic supervision, compensation, and the use of information technology and communication did not have any significant influence on SMK Accounting teachers in Langkat Regency. Motivation was not able to moderate the correlation of educational background, training and development, academic supervision, compensation, and the use of information technology and communication with professional competence of SMK Accounting teachers in Langkat Regency.*

Keywords: *Educational Background, Training and Development, Academic Supervision, Compensation, the Use of Information Technology and Communication, Motivatrion, Professional Competence of Acconting Teacher*

I. INTRODUCTION

The Background of the Study

Educational reform in Indonesia should begin immediately. The Indonesian becomes a big nation because not of the large area, big population, strategic area, and abundant natural resources, but because of the human resources that can compete by having skills in various sectors, in other words highly educated and well-informed human resources, good governance system, and positively in the eyes of the international with strong diplomacy skills. In order to make Indonesian human resources be competent in various fields, it is necessary to have competent teachers. Be able to carry out the job duties and responsibilities, a teacher is required to have certain abilities and skills. These are parts of the teachers' professional competence.

The following below is the result test of accounting teachers competence in 2015 in Langkat Region.

Table 1.1
The Results of Teachers' Competencies of Langkat Regency in 2015

No	Langkat Regency	Result								
		Pedagogical Competence			Professional Competence			Coupled		
		Rate	Max	Min	Rate	Max	Min	Rate	Max	Min
1	Accounting Teacher	51,84	79,36	15,87	53,37	95,23	25,51	52,91	86,9	22,61

Source: Langkat Region Education Offices. 2015

After knowing the results of the competence test of accounting teachers in 2015, it was described that the average score of academic professional competence was 53.37 which is under the Minimum Achievement Completeness (MAC) that has been established by Ministry of Education and Culture in 2012 which is 55 (Regulation of the Minister of Education and Culture No. 57 in 2012 on Teacher Competency Test). This problem attracts the author's attention to observe the factors that influence the professional competence of accounting teachers at the vocational school in Langkat Regency.

The educational background of accounting teacher cannot be denied to be an affecting factor on his professional competence because it directly affects in mastering the accounting materials to teach the students. Then training and development also influences the professional competence of accounting teachers. According to the Regulation of National Education Minister No. 35 in 2010, states that education and functional training is an effort to increase teachers' competences and / or strengthen the knowledge, attitude, values, and skills in accordance with the teacher profession that is useful in the implementation of teacher's duties through institutions that have license from the authorized institution. In addition, academic supervision is one way in improving the professional competence of accounting teachers by realizing the quality of monitored learning and the teacher uses all of his abilities in teaching and learning process. Rusman (2010) said about the criteria of teachers' professional competence which is the using of information technology and communication to communicate and develop themselves. Compensation (reward) is considered as important factor in improving teacher performance, which is an output of the teacher professional competence.

Furthermore, motivation also influences the improvement of professional competence of accounting teachers. Motivation will be able to encourage the accounting teachers to improve knowledge continuously, get training and development in both the form of non-training and training, which is education and training affect the professional competence of accounting teachers. Motivation is also able to encourage the accounting teacher to use the information technology and communication in developing themselves and improving their competences. Then by doing the academic supervision and giving compensation both financial and non-financial compensation is assumed will motivate the teachers in improving their professional competence.

From the explanation above, the researchers are motivated to study further and conduct research entitled "The analysis of factors that influence the professional competence of accounting teachers at Vocational High School in Langkat Region with motivation as a moderating variable".

The Problem Formulation

Based on the research background, it can be formulated two research problems as follows:

1. Do the educational background, training and development, academic supervision, compensation, and using information technology and communication influence simultaneously and partially to the professional competence of accounting teachers at Vocational High School in Langkat Regency?
2. Is motivation able to moderate the correlation between educational background, training and development, academic supervision, compensation, and the use of information technology and communication with professional competence of accounting teacher at Vocational High School in Langkat Regency?

II. THE LITERATURE AND DEVELOPMENT OF HYPOTHESES

Theoretical Basis

Professional Competence of Accounting Teachers

Yamin and Maisah (2010: 11) define a professional competence entirely is the mastery of learning materials widely and deeply, including the mastery of the curriculum of subject matter at school and the scientific substance that oversees the material, and the mastery of the structure and scientific methodology. While the Education National Standards (ENS) article 28 clause 3 point c says "professional competence is the ability of mastering the learning materials widely and deeply in guiding the students to fill the standard competence set out in the SNP."

Ministry Regulation of National Education No. 16 in 2007 about Qualification Standard of Academic and Teacher Competences states that the professional standard competence of accounting teacher includes several competencies consisting of:

1. Mastering the materials, structure, concepts, and scientific mindset that support the accounting subjects.
2. Mastering the standard competence and basic competence of accounting subjects.
3. Developing the accounting learning materials creatively.
4. Developing professionalism continuously by taking reflective action.

Factors that Influence Professional Competence of Accounting Teachers

1. Educational Background

According to Danim (2002: 30) a teacher is said a professional or not, can be seen from two perspectives. First, educational background, and secondly, the mastery of the material, managing learning, controlling students, doing guidance and others. PP no. 19 in 2005, clause 29 paragraph (6) `affirmed the qualification of teachers for SMK / MAK or equivalent is have a minimum qualification of education as fourth diploma (D-IV) or undergraduate (S1), higher educational background appropriate with the lessons taught, and obtained from an accredited course of study.

2. Training and development

Training and development create accounting teachers have the abilities and skills needed in teaching and learning activities, and also could change their attitude while doing their performance (Khan, 2011). According to Danim (2011) training and development forms include: education and training and non-education and training.

3. Academic Supervision

Willes (1967) argues that “supervision is to help improving teaching and learning conditions better”. Supervision is an activity in which its existence helps teachers work better. In the context of academic supervision with the professional competence of accounting teachers, Sergioivanni (1993) suggests three purposes of academic supervision, namely: (1) academic supervision is held with the aim of developing the professional ability of teachers; (2) academic supervision is held to improve the quality of learning; (3) academic supervision is conducted to encourage teachers to use and improve their abilities in carrying out learning, as well as to commit sincerely to their professional job duties and responsibilities.

4. Compensation

Compensation is a service reward for people who have proven their performance toward a person or a company. Compensation is not only money but also secondary compensation, such as increment, promotions, or rewards and others (Rivai, 2010).

5. The use of Information Technology and Communication

The criterion of teacher professional competence is the using of information technology and communication to communicate and develop him/herself (Rusman, 2010). Tileston (2005: 96) states that “technology-based schools will provide it and can be accessible to anyone, throughout the day, and not only in the laboratory”.

6. Motivation

Robbins (2008: 222) defines that “motivation is as a process that explains the intensity, direction, and perseverance of an individual to achieve his goals”. Gibson et. al (1993: 94) suggests that “motivation is a concept we use if we describe the forces that work towards or within the individual to initiate and direct behavior”. Uno (2011) says that “the motivation of teacher in teaching is influenced by internal and external factors of the teacher”.

Review of The Past Research

Based on the observation conducted by Hartinon “strategic factors to improve the teacher competence in learning at Salatiga State Junior High School in 2006”, the results showed that affecting factors of teachers’ competence are work ethic, educational qualification, teaching experience, teaching burden, welfare, MGMP activity, status, and the infrastructure of the school.

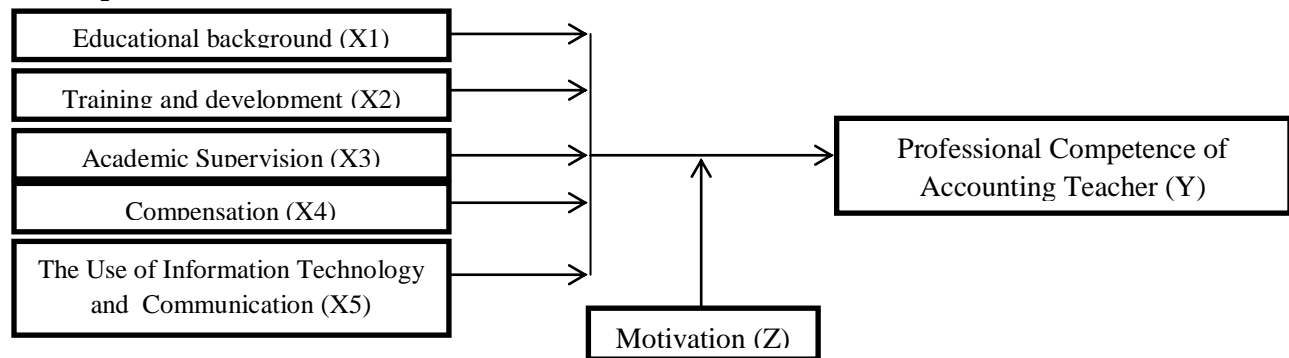
Research conducted by Kartini (2011) entitled “factors that affect the teacher professional competence at SMK Negeri 1 Losarang Indramayu Region”, showed that work ethic had effect significantly on teacher professional competence. While academic qualification, academic supervision, motivation, welfare, the use of information technology and communication (ITC), principal leadership, and training and development had no significant effect on teacher professional competence.

Based on Khan (2011) entitled “Needs Assessment of University Teachers for Professional Enhancement”, the results showed that professional training is very important for teachers or higher education institutions.

Martiningsih (2008) entitled “The Influence of Academic Supervision and Teacher Participation in TWG (Teacher Working Group) to The Professional Competence of Elementary School Teachers in North Pekalongan Sub-district, Pekalongan City”, the results showed that the contribution of academic supervision to the professional competence of teachers was 0.192. The contribution of the teacher participation in TWG to the professional competence of teacher was 0.220.

Mustaqim (2010) entitled “the Influence of Motivation, Educational Background and Ability to Use Media to The Professional Competence of IPS Madrasah Ibtidaiyah Teachers in Kudus Regency”, the results showed that the motivation had significant effect on the professional competence of teachers. Educational background had no significant effect, ability to use media is a less category. Work ethic, educational background, ability to use media had a significant effect on teachers' professional competence.

Conceptual framework



Hypothesis

1. Educational background, training and development, academic supervision, compensation, and the use of information technology and communication have influence both simultaneously and partially to the professional competence of accounting teacher at Vocational High School in Langkat Regency.
2. Motivation is able to moderate the correlation between educational background, training and development, academic supervision, compensation, and the use of information technology and communication to the professional competence of accounting teacher at Vocational High School in Langkat Regency.

III. METHODOLOGY

This study belongs to a causal associative research, is identifying causal relationships between the various variables (Erlina, 2011). The population of this study is all teachers of SMK Program / Finance Competence/ Accounting expertise in Langkat regency as many as 45 people. The determination of the sample using the census method then all members of the population is as sample of the study which is 45 respondents. The type of data used in this research is the primary data and measurement scale is the interval scale. The method of collecting primary data in this research is using questionnaire instrument filled by the respondents. To get the data in this research, the questionnaires were distributed directly by

encountering SMK accounting teachers in Langkat Region. This research uses Likert attitude scale that is range of answer is 1 to 5.

The Method of Data Analysis

The method of the data analysis in this study is multiple regression analysis by doing test includes descriptive statistics, classical assumption test and residual test for moderating variables. The data is processed by using SPSS (Statistical Package for Social Science) program. Multiple regression equation is in model I and residual test is in model II.

1st Model Multiple Linear Regression Analysis to answer the first hypothesis:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$$

2nd Model Residual Test to answer the second hypothesis:

$$Z = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e \dots\dots\dots 1)$$

$$|e| = b_0 + b_6Y \dots\dots\dots ..2)$$

Which :

Y = Professional Competence of Accounting Teacher

b₀ = Constants

b₁ = Regression Coefficient of Educational Background

b₂ = Regression Coefficient of Training and Development

b₃ = Regression Coefficient of Academic Supervision

b₄ = Compensation Regression Coefficient

b₅ = Regression Coefficient Utilization of Information and Communication Technology

b₆ = Moderating Variable of Regression Coefficients

X₁ = Educational Background

X₂ = Training and Development

X₃ = Academic Supervision

X₄ = Compensation

X₅ = Utilization of Information and Communication Technology

|e| = Residual Absolute

e = Error

IV. RESULT AND DISCUSSION

The Result of the Research

Data Quality Test Results

1. Data Validity of the Test Results

The result of the validity test shows that all the variables have r score count greater than r table at the significance level $\alpha = 5\%$ of 0.294, so it is valid.

2. Data Reliability of the Test Results

The Reliability of the test result shows that the score of cronbach's alpha for all variables greater than 0.700 (Nunnally, 1994) it can be stated data from the instrument is reliable.

Classic Assumption Test Results

1. Normality Test Result

The results of the graph analysis show that the histogram be ams are in a tight position and the histogram line forms a bell-like position. Seen from the normal graph P. plot shows that is visible dots spread over the diagonal line. And from One Sample Kolmogorov-Smirnov Test shows the value of Kolmogorov-Smirnov is 0,200 which the score is greater than $\alpha = 0,05$ so it can be concluded the distributed data is normal.

2. Multicollinearity Test Result

Based on the results of SPSS show that the value of Variance Inflation Factor (VIF) of each variable is less than 10 and tolerance value ≥ 0.10 , it can be concluded that there is no multicollinearity among the independent variables.

3. Heterocedasticity Test Results

The result of heteroscedasticity test through the scatterplot graph shows that the points spread out randomly and spread either above or below number 0 on Y axis. It can be concluded that there is no heteroscedasticity or homoscedasticity. A good regression model is homoscedasticity (Ghozali, 2013).

Research Hypothesis of the Test Results

1. Coefficient Determination Test Results (Adjusted R²)

Table 4.1
Coefficient Determination Test Results
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,694 ^a	,481	,415	3,968

a. Predictors: (Constant),

Independent variables: educational background, training and development, academic supervision, compensation, and the use of information technology and communication

Dependent variable: professional competence of accounting teachers

From table 4.1 shows that the adjusted R² score is 0.415 indicates that the independent variables of educational background, training and development, academic supervision, compensation, and the use of information technology and communication are together able to explain 41.5% variation of professional competence variables of accounting teachers, while the rest of 58.5% is explained by other variables outside this research model.

2. Statistical Test Results F

Table 4.2
Statistical Test Results F
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	569,572	5	113,914	7,233	,000 ^b
	Residual	614,206	39	15,749		
	Total	1183,778	44			

a. Dependent Variable: professional competence of accounting teachers

b. Predictors: (Constant), educational background, training and development, academic supervision, compensation, and the use of information technology and communication

Based on Table 4.2, the score of F arithmetic is 7.233 and the score of sig is 0,000, while the score of F table with the score of df (n1) = 5, df (n2) = 39, and the level of significance is 0.05 then obtained F table score is 2.46. Thus, the score of F arithmetic (7,233) > F table (2,46) and significant score 0,000 < α (0,05), simultaneously variable of educational background, training and development, academic supervision, compensation, and the use of information technology and communication has a significant effect on the professional competence of accounting teachers.

3. Statistical Test Results t

Table 4.3
Statistical Test Results t
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	23,504	6,894		3,409	,002
	Educational background	1,090	,471	,297	2,314	,026
	Training and Development	,546	,162	,451	3,373	,002
	Academic Supervision	,097	,141	,089	,689	,495
	Compensation	,201	,231	,117	,871	,389
	The use of Information Technology and Communication	,019	,267	,010	,070	,945

a. Dependent Variable: professional competence of accounting teachers

The results in table 4.3 show that the variables (X1) and (X2) have t scores are 2,314 and 3,373 greater than t table 2.023 and the significance level is 0.026 and 0.002 is smaller than α (0.05). It can be concluded that partially educational background and training and development have a significant effect on professional competence of accounting teacher. While (X3), (X4), and (X5) have t score is 0.689, 0.871, and 0.070 is smaller than t table 2.023 and the significant level is greater than α (0.05). It can be concluded that partially no significant effect on the professional competence of accounting teachers.

4. Moderating Test Results (Residual Test)

Table 4.4
Residual Test Results
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,344	,512		2,623	,012
	Professional competence of accounting teachers	-,018	,010	-,271	-1,844	,072

a. Dependent Variable: ABSRES_1

The result of the residual test shows that the significant score of 0.072 is bigger than $\alpha = 0,05$ ($0,072 > \alpha = 0,05$) and negative coefficient score is (-1844) it can be concluded that motivation is not moderating variable in this research.

Discussion

1. Simultaneously educational background, training and development, academic supervision, compensation, and the use of information Technology and communication have a significant effect on professional competence of accounting teacher at Vocational High School in Langkat Regency. Which the score of F arithmetic is greater than F table and its significance score is less than negligible.
2. Partially, the variable of educational background and training and development have a significant effect on professional competence of Vocational High School accounting teacher in Langkat Regency, which t score is bigger than t table and its significance score is less than negligible. This is caused the educational background determines the personality of a person, including the mindset and

knowledge, and the training and development is in accordance with his professional competence. The variables of academic supervision, compensation and the use of information technology and communication have no significant effect on professional competence of accounting teacher at Vocational High School in Langkat Regency, which t score is smaller than t table and its significance score is greater than negligence. This can be expected because the academic supervision has not been carried out continuously, the academic supervision has not been scheduled certainly, and academic supervision carried out only by administrative supervision itself without the principal or supervisor in class or field. Then the compensation in the form of salary received is not in accordance with the standard salary of teachers or RMW (Regional Minimum Wage) and does not get service or guarantee from the institute. Furthermore, accounting teachers have yet used ITC in learning due to the unavailability of information technology and communication (web, e-book and e learning) as a whole in schools, and inadequate human resources.

3. Motivation is not able to moderate the correlation of educational background, training and development, academic supervision, compensation, and the use of information technology and communication with professional competence of accounting teacher at Vocational High School in Langkat Regency. This is due to the negative parameter coefficient score but the significance value is greater than the negligent.

V. CONCLUSIONS AND SUGGESTIONS

Conclusion

1. The educational background, training and development, academic supervision, compensation, and the use of information technology and communication simultaneously have a significant effect on the professional competence of accounting teachers at Vocational High School in Langkat Regency. Partially, the variables of education, and training and development have significant influence on professional competence of Vocational High School accounting teacher in Langkat Regency, while academic supervision, compensation and the use of information technology and communication have no significant effect on professional competence of accounting teacher at Vocational High School in Langkat Regency.
2. Motivation is not able to moderate the correlation of educational background, training and development, academic supervision, compensation, and the use of information technology and communication with professional competence of accounting teacher at Vocational High School in Langkat Regency.

Suggestion

Based on the conclusions, the refinements suggested by researcher are:

1. Based on the limitations of this study, for the next researchers who want to examine the professional competence of accounting teachers are suggested to add other variables related to the professional competence of accounting teachers such as accounting teaching experience, work ethic, teacher certification, employment status, school infrastructure. Furthermore, in addition to using the questionnaire, it is also suggested to complete it by interviewing to obtain more accurate information, increase the number of the population/sample and use other variables as a moderating variable
2. For accounting teachers in Langkat Regency need to improve the ability on information technology and communication, especially information technology and communication related to professional competence. Therefore accounting teachers need to understand the effectiveness of academic supervision in Langkat Regency.
3. For the principal or supervisor need to carry out academic supervision continuously so the results could influence the professional competence of accounting teachers.
4. For education offices such as heads of regions, heads of education offices and stakeholders need to determine educational policies related to welfare or teacher compensation, thus accounting teachers are more motivated in improving their professional competence.

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